

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS

CYTOLOGIX CORPORATION,

Plaintiff,

v.

VENTANA MEDICAL SYSTEMS, INC.,

Defendant.

Civil Action No. 04-11783 (RWZ)

---

**DECLARATION OF ALEX H. SLOCUM**

---

I, Alexander H. Slocum, declare as follows:

1. I make this declaration in support of Plaintiff CytoLogix Corporation's Reply Memorandum in Support of its Combined Motion for Claim Construction and Summary Judgment on Infringement.
2. I have been retained by the CytoLogix Corporation as an expert in connection with the litigation between CytoLogix Corporation and Ventana Medical Systems, Inc. I have personal knowledge of the facts set forth below.
3. I am a Professor of Mechanical Engineering at the Massachusetts Institute of Technology ("MIT").
4. I received my Bachelors of Science in Mechanical Engineering from MIT in 1982, my Masters of Science in Mechanical Engineering from MIT in 1983 and my PhD in Mechanical Engineering from MIT in 1985. A copy of my CV is attached as Ex. A.

5. In 2003, I offered trial testimony in this Court about the perspective of one of ordinary skill in the art of tissue staining instrumentation, the art described and claimed in U.S. Patent No. 6,541,261 B1 (“the ‘261 patent”).

6. I have been asked to consider the common understanding of the claim phrase “moving the platform and a liquid dispenser relative to each other” to one of skill in the art of the ‘261 patent.

7. All motion is defined with respect to a frame of reference, which is a perspective from which a system is observed. A reference frame provides a set of axes relative to which an observer can measure the position and motion of all points in a system.

8. When a reference frame is not defined, it is generally assumed to be the reference frame of the observer (e.g., the person describing the motion). For example, if a policeman on a moving subway train tells a passenger “Don’t move!” he means don’t move with respect to his frame of reference, the train. He is not ordering the passenger to jump from the train. Once a reference frame is explicitly defined, however, it should not be assumed to be the frame of the speaker.

9. The claim phrase in question, “moving the platform and a liquid dispenser relative to each other,” plainly defines frames of reference. The phrase states that the platform is moving relative to the frame of reference of the liquid dispenser, and the liquid dispenser is moving relative to the frame of reference of the platform. In other words, an observer on the platform would see the liquid dispenser moving, and an observer on the liquid dispenser would see the platform moving.

10. The phrase “moving the platform and a liquid dispenser relative to each other” does not require that both the platform and liquid dispenser move relative to the ground. The

required motion could be accomplished by: (a) holding the liquid dispenser stationary (relative to the ground) while moving the platform (relative to the ground); holding the platform stationary (relative to the ground) while moving the liquid dispenser (relative to the ground); or (c) moving both the platform and the liquid dispenser (relative to the ground) at different rates, such that their relative positioning is changing. The phrase only requires *relative* motion between the platform and the liquid dispenser.

11. One of skill in the art of the '261 patent would have at least a bachelor's degree (or equivalent background) in mechanical engineering, which would include an introductory physics course. One of skill in the art would be familiar with the basic physics concept of relative motion.

12. I have reviewed the declaration of Professor Nunberg. I understand that he contends that the claim phrase "moving the platform and a liquid dispenser relative to each other" requires that the platform and dispenser both move (presumably) relative to the ground. One of skill in the art of the '261 patent would never read the phrase this way. It plainly describes relative motion between the platform and liquid dispenser. That relative motion could be accomplished in any of the three manners I described above in ¶ 10. It does not require, for example, that the slide platform and liquid dispenser both spin.

13. Professor Nunberg also states that "CytoLogix is proposing to arbitrarily rewrite the language of the claim to change its meaning to: 'moving either the platform or and a liquid dispenser relative to the each other.'" I do not agree. Professor Numberg's "rewrite" actually makes no sense. If the platform is moving relative to the liquid dispenser, then the liquid dispenser is necessarily moving relative to the platform. Those of skill in the art of the '261 patent (or anyone with a basic mechanical engineering background) would not describe

movement as Professor Nunberg does. The standard way to describe relative motion between two objects is to state that the two objects move relative to each other, as the claim language does here.

I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: May 2, 2006

BY:   
Alexander H. Slocum